



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

SCIENCE

A WEEKLY JOURNAL DEVOTED TO THE ADVANCEMENT OF SCIENCE, PUBLISHING THE
OFFICIAL NOTICES AND PROCEEDINGS OF THE AMERICAN ASSOCIATION
FOR THE ADVANCEMENT OF SCIENCE.

FRIDAY, NOVEMBER 4, 1904.

CONTENTS:

<i>The Physical Properties of Aqueous Salt Solutions in Relation to the Ionic Theory:</i>	
PROFESSOR ARTHUR A. NOYES.....	577
<i>The Field of Logic:</i> PROFESSOR FREDERICK J. E. WOODBRIDGE.....	587
<i>Clarence L. Herrick:</i> PROFESSOR A. D. COLE..	600
<i>Scientific Books:—</i>	
<i>The Harriman Alaska Expedition:</i> C. L. MARLATT. <i>Haller's Lehrbuch der vergleichenden Anatomie:</i> J. P. McM.....	601
<i>Societies and Academies:—</i>	
<i>The San Francisco Section of the American Mathematical Society:</i> PROFESSOR G. A. MILLER. <i>New York Academy of Sciences, Section of Geology and Mineralogy:</i> EDMUND OTIS HOVEY. <i>The Elisha Mitchell Scientific Society:</i> PROFESSOR ALVIN S. WHEELER	604
<i>Discussion and Correspondence:—</i>	
<i>Soil Management:</i> PROFESSOR E. W. HIL- GARD. <i>'The Metric Fallacy,' once more:</i> PROFESSOR W. LE CONTE STEVENS. <i>Pro- fessor William Morton Wheeler on the Kelep:</i> O. F. COOK.....	605
<i>Special Articles:—</i>	
<i>The Brain of a Swedish Statesman:</i> DR. EDW. ANTHONY SPITZKA.....	612
<i>Scientific Notes and News.....</i>	613
<i>University and Educational News.....</i>	616

MSS. intended for publication and books, etc., intended for review should be sent to the Editor of SCIENCE, Garrison-on-Hudson, N. Y.

THE PHYSICAL PROPERTIES OF AQUEOUS SALT SOLUTIONS IN RELATION TO THE IONIC THEORY.*

It is generally recognized that the further progress of physical science will be greatly facilitated by a better systematization of the knowledge already accumulated, and this is true in an especially high degree of the newly developed branch of science in which this section is directly interested. It has, therefore, seemed to me that the most valuable contribution that I could make toward the solution of the present problems of physical chemistry in correspondence with the aims of this Congress, would be a formulation of the present status of some of our knowledge relating to important classes of phenomena which are being actively investigated, but which have not yet received a final interpretation. It was my original hope to discuss several such classes of phenomena; but the effort involved in the collation and criticism of the available data connected with the problem which was first studied, forced me to confine my attention to that alone. This problem concerns *the physical properties of aqueous salt solutions in relation to the ionic theory*. This is the subject which I shall attempt to present to you: I hope that its importance and the greater definiteness that can be given to its treatment may compensate for the somewhat limited scope of this paper.

Permit me to say in advance that I have

* Address delivered at St. Louis before the Section of Physical Chemistry of the Congress of Arts and Science.